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(312) 360-0080

FIG.1

PROTECTION LAYER
FREE MAGNETIC LAYER
NON MAGNETIC LAYER
SECOND PINNED MAGNETIC LAYER
ANTI FERRO MAGNETICALLY COUPLING LAYER
FIRST PINNED MAGNETIC LAYER
SEED LAYER

FIG.2

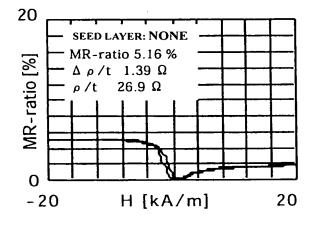
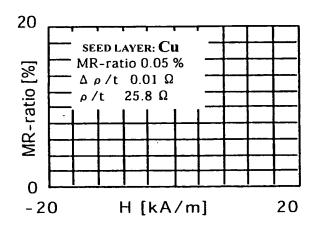


FIG.3



Sheet 2 of 7

(312) 360-0080

FIG.4

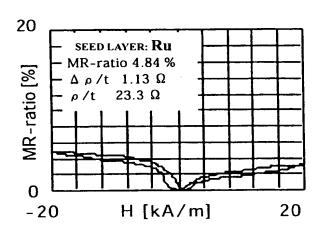


FIG.5

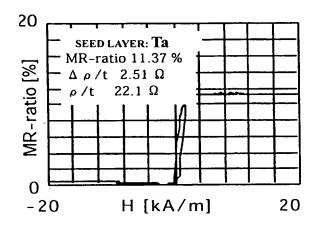


FIG.6

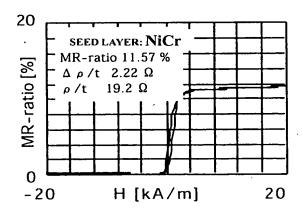


FIG.7

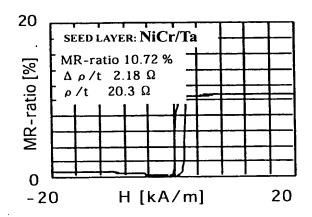
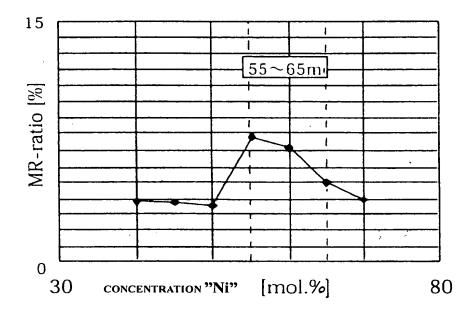


FIG.8



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Feb.6, 2004 (Patrick G. Burns) (312) 360-0080

FIG.9

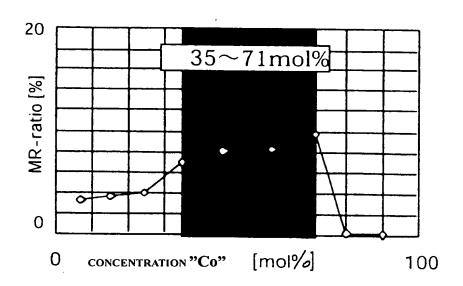
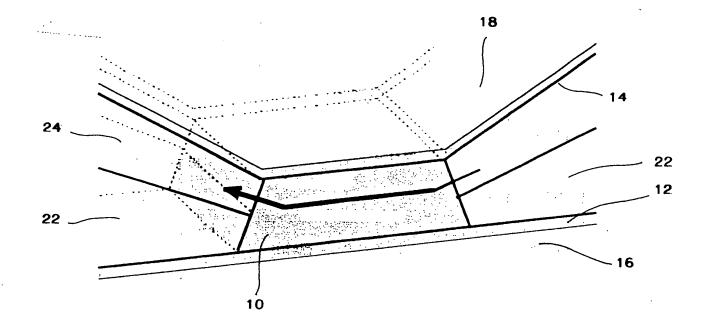


FIG.10
BACKGROUND ART



MAGNETORESISTANCE EFFECT FILM... Kenji Noma Greer, Burns & Crain, Ltd. Ref. No. 2309.69582 Sheet 5 of 71

(Patrick G. Burns)

(312) 360-0080

Feb.6, 2004

FIG.11

BACKGROUND ART

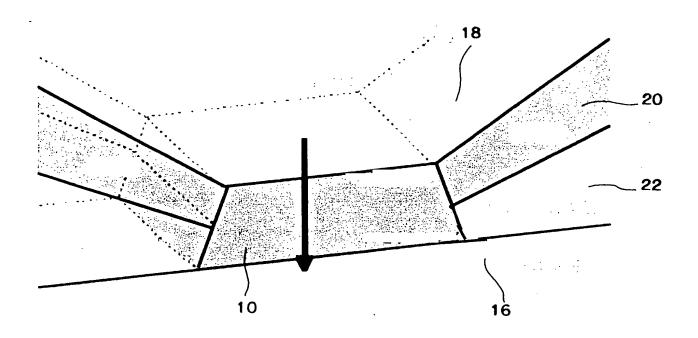
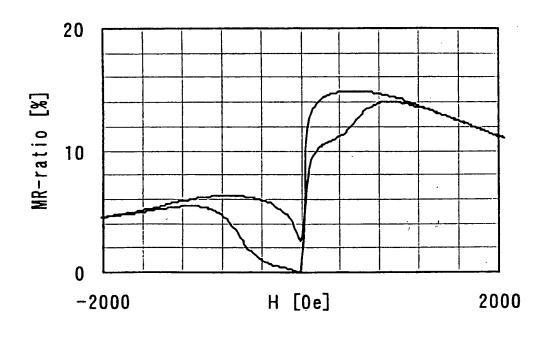


FIG.14



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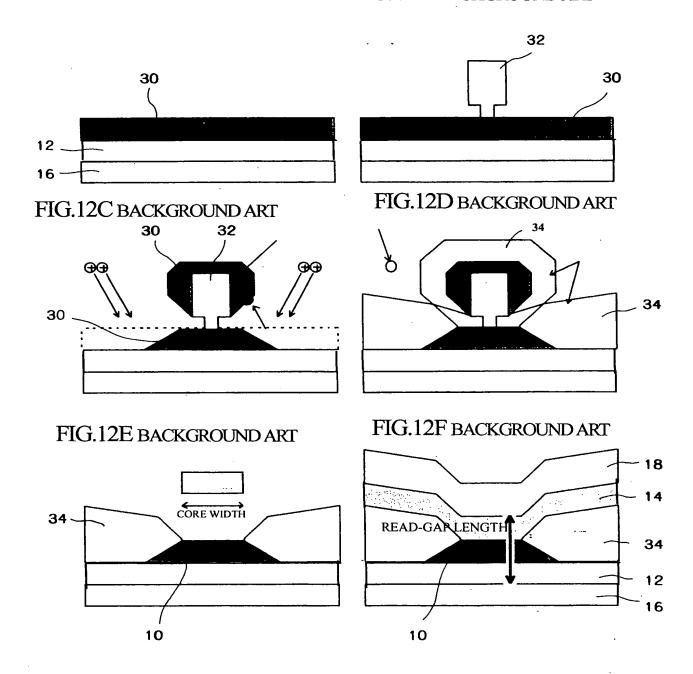
Sheet 6 of 7

Feb.6, 2004 (Patrick G. Burns)

(312) 360-0080

FIG.12A BACKGROUND ART

FIG.12B BACKGROUND ART



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Sheet 7 of 7

Feb.6, 2004 (Patrick G. Burns)

(312) 360-0080

FIG.13A BACKGROUND ART

FIG.13B BACKGROUND ART

